The HIV/AIDS Epidemic among Communities of Color in Massachusetts – Detailed Data Tables and Technical Notes:

Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Disease, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2015, this resulted in the removal of 4,401 HIV/AIDS cases, of which 1,021 have died and 3,380 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location at diagnosis, is the basis for MDPH service planning. Please note that previous HIV/AIDS fact sheets, data reports and presentations included cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual risk category for men; those cases have been reassigned to the no identified risk (NIR) category. The presumed heterosexual risk category was used with the intention of identifying HIV risk for women when sex with men is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. The application of the presumed heterosexual risk category to men is overly inclusive in that woman to man HIV transmission is biologically less probable, and there are alternate risks that are possible for men, including sex with other men (MSM) or IDU. The CDC reports men diagnosed with HIV/AIDS who report sex with women as their only risk factor, without corresponding partner risk or HIV status information, in the NIR category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for men in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual risk categories for women.

Table 1. Total number of people reported with HIV infection or AIDS¹ by mortality status on December 31, 2014: Massachusetts N People Living with HIV/AIDS 19,737 60%

3,380

13,428

33,165

40%

100%

Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

People Reported with HIV or AIDS Who Are Deceased

People Living with HIV/AIDS and First Diagnosed in Another U.S. State

Total Number of People Reported with HIV Infection or AIDS²

January 1, 1999

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts; therefore people living with HIV/AIDS and first diagnosed in another U.S. state are not included in the total number of people reported with HIV Infection or AIDS.

Table 2. People living with HIV/AIDS on December 31, 2014 by gender, race/ethnicity, place of birth and health service region: Massachusetts¹

People Living with HIV/AIDS on 12/31/14

/// 12/31/1 4
%
740/
71%
29%
%
43%
30%
25%
2%
1%
%
65%
10%
25%
25 /0
%
32%
8%
15%
16%
14%
11%
5%
100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state

before being reported in Massachusetts. ² Ninety-eight percent of people living with HIV/AIDS in MA who were born in a US dependency were born in Puerto Rico, 2% were born in US minor outlying areas ,<1% were born in the US Virgin Islands, and <1% were born in Guam.

Reflects the health service region of a person's residence at the time of report (not necessarily current residence); See

Epidemiologic Profile General Appendices, Health Service Region Maps, available at

http://www.mass.gov/dph/aids/research/profile2005/app5 hrs maps.pdf for configuration of health service regions

HSRs are regions defined geographically to facilitate targeted health service planning. While prisons are not an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. The prisons category represents persons who were diagnosed with HIV/AIDS while in a correctional facility. These data do not reflect

current incarceration status.

Total includes 15 people living with HIV/AIDS with unknown HSR; Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

Table 3. People living with HIV/AIDS by reported risk: Massachusetts¹

People Living with HIV/AIDS on 12/31/14

Reported risk:	N	%
Male-to-male sex (MSM)	7,450	38%
Injection drug use (IDU)	3,633	18%
MSM/IDU	677	3%
Receipt of blood/blood products/other	66	<1%
Pediatric	340	2%
Total heterosexual sex (HTSX)	2,768	14%
HTSX w/ an injection drug user	890	5%
 HTSX w/ bisexual men (women only) 	42	<1%
 HTSX w/ a person w/ HIV or AIDS 	47	<1%
Other HTSX ²	1,789	9%
Total undetermined/other	4,803	24%
 Presumed heterosexual sex³ 	1,813	9%
 Undetermined/other⁴ 	2,990	15%
Total	19,737	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/15

Note: The category of "presumed heterosexual" is used in Massachusetts to re-assign women who are reported with an exposure of heterosexual sex, but only with a partner of unknown HIV status or behavioral risk. Massachusetts uses the category of presumed heterosexual to distinguish these women from other undetermined cases about which we know less. Prior to January 1, 2011, the presumed heterosexual category was also used to report HIV data in men. The rationale for the application of the presumed heterosexual reported risk category to women only has been addressed in the MDPH OHA report "Intersecting Risks: HIV Infection among Heterosexual Women and Men in Massachusetts." (2010)

http://www.mass.gov/Eeohhs2/docs/dph/aids/intersecting_risks.pdf. Nationally, the Centers for Disease Control and Prevention categorize "presumed heterosexual" cases as "no identified risk" (NIR). As such, comparisons of the presumed heterosexual category cannot be made to national data. Caution should be used in interpreting data for presumed heterosexual, as it is still not clear what the exposure risk was for women in this category. Although a person may not report other risk behaviors, such as injection drug use to a health care provider, it does not exclude the possibility that an individual has experienced these other risks. There are many barriers to disclosing HIV risk behaviors in the health care setting such as a limited patient-provider relationship or stigma.

² Includes heterosexual sex with a person who received blood/blood products.

³ Includes woman sex with men of unknown HIV status or risk. This category is limited to women.

⁴ Includes man sex with women of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

Table 4. People living with HIV/AIDS on December 31, 2014 by gender and race/ethnicity: Massachusetts¹

	Men		Women	1
Race/Ethnicity:	N	%	N	%
White, non-Hispanic	7,086	50%	1,383	25%
Black, non-Hispanic	3,309	23%	2,585	46%
Hispanic/Latino	3,325	24%	1542	27%
Asian/Pacific Islander	278	2%	79	1%
Other/Unknown	100	1%	50	1%
Total	14,098	100%	5,639	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Table 5. People diagnosed with HIV infection by gender and race/ethnicity: Massachusetts¹, 2011–2013²

	Men		Wome	n	State To	tal
Race/Ethnicity:	N	%	N	%	N	%
White (NH)	679	44%	99	18%	778	37%
Black (NH)	368	24%	292	53%	660	31%
Hispanic/Latino	432	28%	141	26%	573	27%
API	53	3%	12	2%	65	3%
Other/Unknown	21	1%	7	1%	28	1%
Total	1,553	100%	551	100%	2,104	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/15

Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999. (NH) = Non-Hispanic, API = Asian/Pacific Islander

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding). Data as of 1/1/15

Explanation of age adjusted rates

A "rate" of a disease per 100,000 population is a useful way to compare groups that have substantially different population sizes rather than relying on the raw number of cases. For example, the number of people living with HIV/AIDS on December 31, 2014 who are Hispanic/Latino, is 4.867 whereas the number of people living with HIV/AIDS who are white (non-Hispanic) is 8,469. Although the *number* of people living with HIV/AIDS who are Hispanic/Latino in Massachusetts is smaller than the number of people living with HIV/AIDS who are white (non-Hispanic), we also need to consider that there are far fewer people of Hispanic/Latino heritage living in Massachusetts than white (non-Hispanic) individuals. Hispanic/Latino individuals represent 10% of the Massachusetts population compared to white (non-Hispanic) individuals who represent 78% of the population¹. If HIV/AIDS had the same impact on the Hispanic/Latino population of the state as on the white (non-Hispanic), then there should be eight times as many cases in white (non-Hispanic) individuals, but there are less than twice as many. By calculating a rate which takes into consideration the differences in the population size, it is evident that the number of people living with HIV/AIDS for every 100,000 Hispanic/Latino individuals in Massachusetts is much higher than the rate for every 100,000 white (non-Hispanic) individuals. This is called a "crude rate" and is calculated by dividing the number of people living with HIV/AIDS by the population of interest (the total number of Hispanic/Latino individuals in Massachusetts, for example) and multiplying by 100,000. (See example 1.A below).

¹ The denominators for prevalence calculations are based on year 2010 population estimates from the MDPH Bureau of Health Information, Statistics, Research and Evaluation

Example 1.A: Calculation of crude HIV/AIDS prevalence rate for white (non-Hispanic) individuals, Massachusetts (165.0 per 100,000)

Crude HIV/AIDS prevalence rate for white (non-Hispanic) individuals

= (number of white (non-Hispanic) individuals living with HIV/AIDS ÷ population size of white (non-Hispanic) individuals)×100,000

 $= (8,469/5,132,633) \times 100,000$

 $= (.00016500) \times 100,000$

= 165.0

However, sometimes, in addition to the population size being different, the age composition of the populations is different. In Massachusetts, black (non-Hispanic) and Hispanic/Latino populations are generally younger than white (non-Hispanic). The median age of black (non-Hispanic) people (29.7 years) and Hispanic/Latino people (24.5 years) is younger than that of white (non-Hispanic) people (38.8 years). Therefore, it is necessary to "age-adjust" the HIV/AIDS prevalence rate to get a true comparison of the impact of the disease across racial/ethnic groups without an effect from the differences in age composition. Age-adjustment of rates minimizes the distortion created by differences in age composition.

Age-adjusted rates are calculated by weighting the age-specific rates for a given population by the age distribution of a standard population. The weighted age-specific rates are then added to produce the adjusted rate for all ages combined. (See example 1.B below).

Example 1.B: Calculation of age-adjusted HIV/AIDS prevalence rate for white (non-Hispanic) individuals, Massachusetts (139.0 per 100,000)

Α	В	С	D	Е
Age group (in years)	# of prevalent HIV/AIDS cases	Population (2010)	2000 US standard population weight	Age-adjusted rate ((B÷C×D)×100,000))
<1	0	48,010	0.013818	0.00
1-4	0	200,452	0.055317	0.00
5-14	4	571,967	0.145565	0.10
15-24	86	677,899	0.138646	1.76
25-34	522	603,245	0.135573	11.73
35-44	1,067	676,064	0.162613	25.66
45-54	3,309	841,315	0.134834	53.03
55-64	2,635	697,852	0.087247	32.94
65-74	720	403,518	0.066037	11.78
75-84	117	275,380	0.044842	1.91
85+ years	9	136,931	0.015508	0.10
Total	8,469	5,132,633	1.000000	139.0

To see the effect of age-distribution on prevalence rates see Table 6 below for a comparison of crude and age-adjusted rates by race/ethnicity.

Table 6. Crude and age-adjusted HIV/AIDS prevalence per 100,000 population¹ on December 31, 2014 by race/ethnicity and gender: Massachusetts²

	Crude rate per	Age-adjusted rate
State Total:	100,000	per 100,000
		•
White, non-Hispanic	165.0	139.0
Black, non-Hispanic	1,418.9	1,460.0
Hispanic/Latino	775.4	1,011.2
Asian/Pacific Islander	99.3	101.7
Total prevalence	301.5	272.4
Total prevalence	301.3	212.4
	Crude rate per	Age-adjusted rate
Men:	100,000	per 100,000
		-
White, non-Hispanic	285.8	239.2
Black, non-Hispanic	1,649.3	1,753.3
Hispanic/Latino	1,079.2	1,487.3
Asian/Pacific Islander	161.6	166.0
Total prevalence among men	445.3	399.9
Total prevalence among men	443.3	333.3
	Crude rate per	Age-adjusted rate
Women:	100,000	per 100,000
White, non-Hispanic	52.1	45.4
Black, non-Hispanic	1,203.7	1,217.1
Hispanic/Latina	482.5	604.3
Asian/Pacific Islander	42.1	43.5
Total prevalence among women	166.8	154.3

¹ The denominators for rate calculations are from the MDPH Massachusetts Race Allocated Census 2010 Estimates (MRACE 2010), Massachusetts Department of Public Health, Bureau of Health Information, Statistics, Research, and Evaluation

Data Source: MDPH HIV/AIDS Surveillance Program; Data as of 1/1/15

Evaluation

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Table 7. Crude and age-adjusted rates of diagnosis of HIV infection per 100,000 population¹ by race/ethnicity and gender: Average annual rate 2011–2013², Massachusetts³

State total:	Crude rate per 100,000	Age-adjusted rate per 100,000
White (non-Hispanic)	5.1	5.1
Black (non-Hispanic)	53.0	52.6
Hispanic/Latino	30.4	31.8
Asian/Pacific Islander	6.0	5.2
Total rate	10.7	10.7
Men:	Crude rate per 100,000	Age-adjusted rate per 100,000
White (non-Hispanic) Men	9.1	9.0
Black (non-Hispanic) Men	61.1	61.6
Hispanic/Latino Men	46.7	48.7
Asian/Pacific Islander Men	10.3	8.8
Total rate among men	16.3	16.2
Women:	Crude rate per 100,000	Age-adjusted rate per 100,000
White (non Hispania) Waman	1.2	1.3
White (non-Hispanic) Women Black (non-Hispanic) Women	45.3	44.6
Hispanic/Latina Women	45.3 14.7	16.0
Asian/Pacific Islander Women	2.1	1.9
Total rate among women	5.4	5.5

¹The denominators for rate calculations are from the MDPH Massachusetts Race Allocated Census 2010 Estimates (MRACE 2010), Massachusetts Department of Public Health, Bureau of Health Information, Statistics, Research, and Evaluation

Data Source: MDPH HIV/AIDS Surveillance Program; Data as of 1/1/15

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.
³ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Table 8. Crude and age-adjusted rates of death among people reported with HIV/AIDS per 100,000 population¹ by race/ethnicity and gender: average annual rate 2011–2013, Massachusetts²

State Total:	Crude Rate per 100,000	Age-Adjusted Rate per 100,000
White (non-Hispanic)	2.1	1.7
Black (non-Hispanic)	13.9	14.6
Hispanic/Latino	7.8	10.7
Mass. Total Rate	3.3	2.9
Men:	Crude Rate per 100,000	Age-Adjusted Rate per 100,000
White (non-Hispanic) Men	3.3	2.6
Black (non-Hispanic) Men	18.4	20.5
Hispanic/Latino Men	11.1	16.9
Mass. Total Rate Among Men	4.9	4.2
Women:	Crude Rate per 100,000	Age-Adjusted Rate per 100,000
White (non-Hispanic) Women	1.0	0.9
Black (non-Hispanic) Women	9.6	9.8
Hispanic/Latina Women	4.6	5.6
Mass. Total Rate Among Women	1.9	1.7

¹ The denominators for rate calculations are from the Massachusetts (Department of Public Health) Modified Age, Race/Ethnicity, & Sex Estimates 2010; all rates are age-adjusted using the 2000 US standard population.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, Office of HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being diagnosed and reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program; Data as of 1/1/15

Table 9. People diagnosed with HIV infection by race/ethnicity¹ and reported risk: Massachusetts², 2011–2013³

	White (NH)	Black (I	NH)	Hispanic/I	Latino
Reported risk:	N	%	N	%	N	%
Male-to-male sex (MSM)	512	66%	128	19%	224	39%
Injection drug use (IDU) MSM/IDU	64 ⁶	8% ⁶	24 ⁶	4% ⁶	64 ⁶	11% ⁶
Heterosexual sex Other	29 ⁶	4% ⁶	99 ⁶	15% ⁶	65 ⁶	11% ⁶
Total undetermined/other	127	16%	398	60%	212	37%
 Presumed heterosexual sex⁴ 	24	3%	178	27%	64	11%
 Undetermined⁵ 	103	13%	220	33%	148	26%
Total	778	100%	660	100%	573	100%

Data for Asian/Pacific Islander, American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small

(NH) = Non-Hispanic

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for

the most recently available three-year period after the implementation of HIV infection reporting in 1999.

⁴ Includes woman sex with men of unknown HIV status or risk. This category is limited to women.

⁵ Includes man sex with women of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁶ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Table 10. *Men* diagnosed with HIV infection by race/ethnicity¹ and reported risk: Massachusetts², 2011–2013³

	White (NH)	Black (NH)	Hispanic/	Latino
Reported risk:	N	%	N	%	N	%
Male-to-male sex (MSM)	512	75%	128	35%	224	52%
Injection drug use (IDU)	27	4%	18	5%	48	11%
MSM/IDU	45	7%	 ⁵	 ⁵	5	 ⁵
Heterosexual sex	11	2%	34	9%	26	6%
Other	0	0%	 ⁵	 ⁵	 ⁵	 ⁵
Undetermined ⁴	84	12%	180	49%	126	29%
Total ⁵	679	100%	368	100%	432	100%

Data for Asian/Pacific Islander, American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/15

Table 11. *Women* diagnosed with HIV infection by race/ethnicity¹ and reported risk: Massachusetts², 2011–2013³

	White (NH)	Black (NH)	Hispar Latin	
Reported risk:	N	%	N	%	N	%
Injection drug use	37	37%	6	2%	16	11%
Heterosexual sex	18	18%	65	22%	39	28%
Total undetermined/other	43	43%	218	75%	86	61%
 Presumed heterosexual sex⁴ 	24	24%	178	61%	64	45%
 Undetermined⁵ 	19	19%	40	14%	22	16%
Total ⁶	99	100%	292	100%	141	100%

Data for Asian/Pacific Islander, American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

⁴Includes man sex with women of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation. (NH) = Non-Hispanic

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for

the most recently available three-year period after the implementation of HIV infection reporting in 1999.

⁴ Includes woman sex with men of unknown HIV status or risk. This category is limited to women.

⁵ Includes those still being followed up for risk information, those who have died with no determined risk and those lost to follow-up. ⁶ Totals include pediatric and blood/blood products reported risks. (NH) = Non-Hispanic

Table 12. People diagnosed with HIV infection by race/ethnicity¹ and place of birth: Massachusetts², 2011–2013³

Race/Ethnicity:	US		Puerto R US Depend	4	Non-U	S
	N	%	N	%	N	%
White (NH)	706	91%	6	<1%	71	9%
Black (NH)	294	45%	6	<1%	365	55%
Hispanic/Latino	204	36%	147	26%	222	39%
APÍ	13	20%	0	0%	52	80%
Total	1,241	59%	149	7%	714	34%

Data for American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers.

(NH) = Non-Hispanic, API = Asian/Pacific Islander

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

⁴ Ninety-nine percent of people diagnosed with HIV infection from 2011–2013 who were born in a US dependency were born in Puerto Rico, <1% were born in the US Virgin Islands.

⁵ Totals include people of American Indian/Alaska Native and Other/Unknown race/ethnicity.

⁶ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Table 13. *Men* diagnosed with HIV infection by race/ethnicity¹ and place of birth: Massachusetts², 2011–2013³

	US		Puerto Ri US Depend		Non-U	S
Race/Ethnicity:	N	%	N	%	N	%
White (NH)	614	90%	0	0%	65	10%
Black (NH)	203	55%	0	0%	165	45%
Hispanic/Latino	155	36%	110	25%	167	39%
API	10	19%	0	0%	43	81%
All Men ⁵	1,001	64%	110	7%	442	28%

Data for American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

⁴ Ninety-nine percent of people diagnosed with HIV infection from 2011–2013 who were born in a US dependency were born in Puerto Rico, <1% were born in the US Virgin Islands.

⁵ Totals include people of American Indian/Alaska Native and Other/Unknown race/ethnicity.

⁶ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

⁽NH) = Non-Hispanic, API = Asian/Pacific Islander

Table 14. *Women* diagnosed with HIV infection by race/ethnicity¹ and place of birth: Massachusetts², 2011–2013³

	US		Puerto Ri US Depend		Non-U	S
Race/Ethnicity:	N	%	N	%	N	%
White (NH) Black (NH) Hispanic/Latino All Women ⁵	92 91 49 240	93% 31% 35% 44%	⁶ ⁶ 37 39	⁶ ⁶ 26% 7%	6 200 55 272	6% 68% 39% 49%

¹ Data for Asian/Pacific Islander, American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

⁴ Ninety-nine percent of people diagnosed with HIV infection from 2011–2013 who were born in a US dependency were born in Puerto Rico, <1% were born in the US Virgin Islands.

⁵ Totals include people of American Indian/Alaska Native and Other/Unknown race/ethnicity.

⁶ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation. (NH) = Non-Hispanic

Table 15. Black (non-Hispanic) individuals diagnosed with HIV infection born outside the US by leading countries of birth: Massachusetts¹, 2011–2013²

Rank	Country of Birth	Number of HIV DX ³ among Non-US born	Percent of HIV DX among all Non-US born Black (non- Hispanic) individuals
1	Haiti	110	30.1%
2	Uganda	42	11.5%
3	Cape Verde Island	35	9.6%
4	Kenya	22	6.0%
5	Jamaica	19	5.2%
6	Nigeria	19	5.2%
7	Cameroon	17	4.7%
8	Ghana	16	4.4%
9	Ethiopia	13	3.6%
10	Liberia	8	2.2%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

³ HIV DX = HIV diagnoses

Table 16. Hispanic/Latino individuals diagnosed with HIV infection born outside the US by leading countries of birth: Massachusetts¹, 2011–2013²

Rank	Country of Birth	Number of HIV DX ³ among Non-US born	Percent of HIV DX among all Non-US born Hispanic/Latino individuals
1	Dominican Republic	60	27.0%
2	Brazil	36	16.2%
3	Guatemala	22	9.9%
4	Honduras	21	9.5%
5	El Salvador	20	9.0%
6	Columbia	19	8.6%
7	Mexico	12	5.4%
8	Peru	5	2.3%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in

³ HIV DX = HIV diagnoses

Table 17. People living with HIV/AIDS on December 31, 2014 by current age and race/ethnicity: Massachusetts²

	White	NH	Black	NH	Hispanio	/Latino	State	Total
Age in years	N	%	N	%	N	%	N	%
Under 13	1	<1%	18	<1%	4	<1%	23	<1%
13 to 19	10	<1%	40	1%	24	<1%	77	<1%
20 to 24	79	1%	102	2%	104	2%	293	1%
25 to 29	209	2%	214	4%	183	4%	640	3%
30 to 34	313	4%	282	5%	308	6%	937	5%
35 to 39	444	5%	394	7%	411	8%	1,308	7%
40 to 44	623	7%	607	10%	574	12%	1,887	10%
45 to 49	1,317	16%	945	16%	893	18%	3,251	16%
50 to 54	1,991	24%	1,108	19%	957	20%	4,133	21%
55 to 59	1,620	19%	1,007	17%	741	15%	3,413	17%
60+	1,861	22%	1,177	20%	668	14%	3,775	19%
Total ³	8,468	100%	5,894	100%	4,867	100%	19,737	100%

Data for American Indian/Alaska Native, Asian/Pacific Islander and Other/Unknown race/ethnicity are not

NH = non-Hispanic

presented due to small numbers ² Effective January 1, 2011, the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Table 18. People diagnosed with HIV infection by age at diagnosis and race/ethnicity: Massachusetts, 2011-2013²

	White	NH	Black	NH	Hispanio	:/Latino	State	Total
Age in years	N	%	N	%	N	%	N	%
Under 13	1	<1%	6	1%	0	0%	7	<1%
13 to 19	11	1%	24	4%	23	4%	63	3%
20 to 24	90	12%	66	10%	56	10%	221	11%
25 to 29	92	12%	65	10%	94	16%	270	13%
30 to 34	93	12%	83	13%	90	16%	281	13%
35 to 39	74	10%	71	11%	72	13%	229	11%
40 to 44	101	13%	94	14%	71	12%	280	13%
45 to 49	138	18%	90	14%	71	12%	308	15%
50 to 54	80	10%	73	11%	43	8%	201	10%
55 to 59	57	7%	40	6%	28	5%	129	6%
60+	40	5%	48	7%	25	4%	115	5%
Total	777	100%	660	100%	573	100%	2104	100%

Data for American Indian/Alaska Native, Asian/Pacific Islander and Other/Unknown race/ethnicity are not presented due to small numbers

NH = non-Hispanic

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/15

Table 19. People diagnosed with HIV infection under age 25 years within the years 2011–2013¹ and total population under age 25 years by race/ethnicity: Massachusetts³

	White NH		Black	Black NH His		Hispanic/Latino		State Total	
	N	%	N	%	N	%	N	%	
HIV Infection Diagnoses Total	102	35%	96	33%	79	27%	291	100%	
Population	1,498,328	71%	165,032	8%	298,888	14%	2,096,538	100%	

Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

NH = non-Hispanic

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/15; year 2010 population estimates are from the Massachusetts (Department of Public Health) Modified Age, Race/Ethnicity, & Sex Estimates 2010

Effective January 1, 2011, the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

² Data for American Indian/Alaska Native, Asian/Pacific Islander and Other/Unknown race/ethnicity are not presented due to

small numbers.

³ Effective January 1, 2011, the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Table 20. Percentage distribution of people diagnosed with HIV infection by Health Service Region (HSR)¹ and race/ethnicity: Massachusetts², 2011–2013³

	White (NH)	Black (NH)	Hispanic/ Latino	API	Total
HSR	%	%	%	%	N
Boston HSR	31%	35%	29%	3%	633
Central HSR	34%	33%	28%	3%	165
Metro West HSR	44%	36%	14%	6%	323
Northeast HSR	38%	26%	32%	4%	392
Southeast HSR	49%	31%	17%	1%	309
Western HSR	30%	25%	43%	2%	241
Prisons ⁴	23%	29%	46%	0%	35
Mass. Total	37%	31%	27%	3%	2,104

¹ Reflects the health service region of a person's residence at the time of report (not necessarily current residence). See Epidemiologic Profile General Appendices, Health Service Region Maps, available at

http://www.mass.gov/dph/aids/research/profile2005/app5 hrs maps.pdf for configuration of health service regions.

Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts

³ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

⁴ HSRs are regions defined geographically to facilitate targeted health service planning. While prisons do not constitute an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. Prisons include only persons who were diagnosed with HIV/AIDS while in a correctional facility. These data do not reflect current incarceration status. (NH) = Non-Hispanic, API = Asian/Pacific Islander

Table 21. People living with HIV/AIDS on December 31, 2014 by Health Service Region (HSR)¹ and race/ethnicity: Massachusetts²

HSR	White	(NH)	Black	(NH)	Hispa Lati		AP	I	Other/	Und.	Total
	N	%	N	%	N	%	N	%	N	%	N
Boston	2,441	39%	2,368	38%	1,285	21%	95	2%	47	1%	6,236
Central	685	41%	430	26%	498	30%	29	2%	12	1%	1,654
Metro West	1,441	50%	997	34%	378	13%	80	3%	15	1%	2,911
Northeast	1,334	42%	773	25%	905	29%	109	3%	26	1%	3,147
Southeast	1,632	60%	621	23%	422	15%	19	1%	29	1%	2,723
Western	676	32%	419	20%	1,015	47%	20	1%	13	1%	2,143
Prison ³	254	28%	282	31%	359	40%	5	1%	8	1%	908
Total⁴	8,469	43%	5,894	30%	4,867	25%	357	2%	150	1%	19,737

Reflects the health service region of a person's residence at the time of report (not necessarily current residence). See Epidemiologic Profile General Appendices, Health Service Region Maps, available at

Data Source: MDPH HIV/AIDS Surveillance Program, data as of 1/1/15

http://www.mass.gov/dph/aids/research/profile2005/app5 hrs maps.pdf for configuration of health service regions.

Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³HSRs are regions defined geographically to facilitate targeted health service planning. While prisons do not constitute an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. Prisons include only persons who were diagnosed with HIV/AIDS while in a correctional facility. These data do not reflect current incarceration status.

Mass. total includes five persons living with HIV/AIDS with unknown residence at time of report.

⁽NH)= Non-Hispanic, API = Asian/Pacific Islander, Other/Und. = Other/Undetermined

Table 22. Ten cities/towns¹ in Massachusetts² with the highest proportion of black (non-Hispanic) individuals among HIV infection diagnoses (HIV DX): 2011–2013³

Rank	City/Town	Number of HIV DX among black non- Hispanic individuals	Percent of Total HIV DX
1	Brockton	66	78.6%
2	Waltham	14	46.7%
3	Malden	15	45.5%
4	Lynn	23	45.1%
5	Worcester	36	45.0%
6	Medford	8	38.1%
7	Boston	212	37.4%
8	Cambridge	14	36.8%
9	Framingham	8	34.8%
10	Lowell	23	33.8%

¹ Cities with fewer than 20 HIV infection diagnoses from 2011–2013 are excluded. Note: reflects the city/town of a person's residence at the time of report (not necessarily current residence). People diagnosed while at a correctional facility are not included

² Effective January 1, 2011, the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999. Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding); data as of 1/1/15

Table 23. Ten cities/towns¹ in Massachusetts² with the highest proportion of Hispanic/Latino individuals among HIV infection diagnoses (HIV DX): 2011–2013³

Rank	City/Town	Number of HIV DX among Hispanic/Latino individuals	Percent of Total HIV DX
1	Holyoke	27	81.8%
2	Lawrence	50	79.4%
3	Chelsea	24	64.9%
4	Springfield	62	49.6%
5	Everett	9	37.5%
6	Worcester	26	32.5%
7	New Bedford	14	31.1%
8	Fall River	7	28.0%
9	Lowell	19	27.9%
10	Somerville	10	27.0%

¹ Cities with fewer than 20 HIV infection diagnoses from 2011–2013 are excluded. Note: reflects the city/town of a person's residence at the time of report (not necessarily current residence). People diagnosed while at a correctional facility are not included

² Effective January 1, 2011, the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999. Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding); data as of 1/1/15

	% Used Condom	Total N
Total:	25.2%	2,51
Sex:	% Used Condom	Total I
Male	26.7%	1,04
Female	23.5%	1,46
Race/Ethnicity:	% Used Condom	Total I
White (non-Hispanic)	24.0%	2,05
Black (non-Hispanic)	31.4%	14
Hispanic/Latino	28.0%	19
Number of Partners:	% Used Condom	Total I
1	22.0%	2,34
2	64.7%	7
3+	36.5%	7
Sex of Partner:	% Used Condom	Total I
Male Respondent Reporting Sex with Male	52.4%	6
Male Respondent Reporting Sex with Female	24.8%	97
Female Respondent Reporting Sex with Female	3	2
Female Respondent Reporting Sex with Male	24.1%	1,43